

Serial No.: 10/677,154

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph starting at page 13, line 8 to read:

In equation 1, each individual figure of merit value is associated with a weighting coefficient value (symbolized by the lowercase Greek letters). Each weighting coefficient can be selected to increase or decrease the relative importance of the associated individual figure of merit value. To eliminate a particular individual figure of merit value from consideration, the associated weighting coefficient can be set to zero. Also, each term in the weighted sum can be a linear or non-linear function of the associated individual figure of merit value, rather than ~~tan~~ just a weighted product of the raw individual figure of merit value.

Please amend the paragraph starting at page 15, line 11 to read:

In this embodiment, the general function for computing GFOM for any given OPC simulation tool 24 iteration and/or any given window 42 can include various linear and non-linear combinations of the individual figure of merit values. The possible ways way to combine the individual figure of merits need only be bound by an expectation that the GFOM will contribute to improving image quality and tolerance of at least one process factor variation. As an example, the GFOM could be the sum of a first term calculated by dividing edge placement error by fragmentation complexity and a second term calculated by multiplying contrast, image log slope and the square of depth of focus. Criteria for assisting in establishing the equation for GFOM can include empirical results, geometrical principles relating to edge segment placement and/or specific polygons found in the window 42, theoretical based criteria, principles of optics and/or physics, and so forth.

Serial No.: 10/677,154

Please amend the paragraph starting at page 16, line 14 to read:

As should be appreciated, the OPC simulation tool 24 improves upon conventional ~~convention~~ OPC processes by accounting for process factors that could lead to the introduction of error when imaging a pattern on a wafer. The GFOM calculated as part of each iteration of the OPC simulation tool 24 is not only a function of multiple individual figure of merit values to thereby extend upon a single figure of merit OPC technique, but is also calculated in a manner to account for process variations to minimize error that the OPC simulation itself could introduce. Thus, the GFOM can be used to assist in accounting for process variations that edge placement error alone cannot predict.